§ 80.1240 How is a refinery's or importer's compliance with the gasoline benzene requirements of this subpart determined?

(a) A refinery's or importer's compliance with the annual average benzene standard at § 80.1230(a) is determined as follows:

(1)(i) The compliance benzene value for a refinery or importer is:

$$CBV_y = V_y \times \left(\frac{B_{avg,y}}{100} \right) + D_{y-1} - BC - OC$$

Where:

CBV_y = Compliance benzene value (gallons benzene) for year y.

V_y = Gasoline volume produced or imported in year y (gallons).

$B_{avg,y}$ = Average benzene concentration in year y (volume percent benzene), calculated in accordance with § 80.1238.

D_{y-1} = Benzene deficit from the previous reporting period, per § 80.1230(c) (gallons benzene).

BC = Banked benzene credits used to show compliance (gallons benzene).

OC = Benzene credits obtained by the refinery or importer used to show compliance (gallons benzene).

(ii) Benzene credits used in the calculation specified in paragraph (a)(1)(i) of this section must be used in accordance with the requirements at § 80.1295.

(2)(i) If $CBV_y \leq V_y \times (0.62)/100$, then compliance with the benzene requirement at § 80.1230(a) is achieved for calendar year y.

(ii) If $CBV_y > V_y \times (0.62)/100$, then compliance with the benzene requirement at § 80.1230(a) is not achieved for calendar year y, and a deficit is created per § 80.1230(c). The deficit value to be included in the following year's compliance calculation per paragraph (a) of this section is calculated as follows:

$$D_y = CBV_y - V_y \times \left(\frac{0.62}{100} \right)$$

Where:

D_y = Benzene deficit created in compliance period y (gallons benzene).

(b) Compliance with the maximum average benzene standard at § 80.1230(b) is achieved by a refinery or importer if the value of B_{avg} calculated in accordance with § 80.1238(a) is no greater 1.30 volume percent for an applicable averaging period per § 80.1230(b)(3).

AVERAGING, BANKING AND TRADING (ABT) PROGRAM

§ 80.1270 Who may generate benzene credits under the ABT program?

(a) *Early benzene credits.* Early benzene credits are credits generated prior to 2011, or prior to 2015 if generated by a small refiner approved under § 80.1340.

(1)(i) Early credits may be generated under § 80.1275 by a refiner for any refinery it owns that has an approved benzene baseline under § 80.1285, including a refinery of a foreign refiner that is subject to the provisions of § 80.1363.

(ii) The refinery specified in paragraph (a)(1)(i) of this section must process crude oil and/or intermediate feedstocks through refinery processing units.

(iii) Early benzene credits shall be calculated separately for each refinery of a refiner.

(iv) A refinery that is approved for early compliance under § 80.1334 may not generate early credits for the gasoline subject to the early compliance provisions.

(2)(i) A refinery that was shut down during the entire 2004–2005 benzene baseline period is not eligible to generate early credits under § 80.1275.

(ii) A refinery not in full production, excluding normal refinery downtime, or not showing consistent or regular gasoline production activity during 2004–2005 may be eligible to generate early benzene credits under § 80.1275 upon petition to and approval by EPA, pursuant to § 80.1285(d).

(3) Importers may not generate early credits.

(b) *Standard benzene credits.* Standard benzene credits are credits generated after 2010, or after 2014 if generated by a small refiner approved under § 80.1340.

(1) Unless otherwise provided for elsewhere in this subpart, standard credits may be generated under § 80.1290 as follows:

(i) A refiner may generate standard credits separately for each of its refineries.

(ii) An importer may generate standard credits for all of its imported gasoline.

(2) Oxygenate blenders, butane blenders, and transmix producers may not generate standard credits.

(3) Foreign refiners may not generate standard credits.

§ 80.1275 How are early benzene credits generated?

(a) For each averaging period per paragraph (b) of this section in which a refinery plans to generate early credits, its average gasoline benzene concentration calculated according to § 80.1238(a) must be at least 10% lower than its benzene baseline concentration approved under § 80.1280.

(b) The early credit averaging periods are as follows:

(1) For 2007, the seven-month period from June 1, 2007 through December 31, 2007.

(2) For 2008, 2009 and 2010, the 12-month calendar year.

(3) For small refiners approved under § 80.1340, the 12-month calendar years 2011, 2012, 2013, and 2014 in addition to the periods specified in paragraphs (b)(1) and (b)(2) of this section.

(c) The number of early benzene credits generated shall be calculated for each applicable averaging period as follows:

$$EC_y = \left[\frac{B_{Base} - B_{avg,y}}{100}\right] \times V_{e,y}$$

Where:

EC_y = Early credits generated in averaging period y (gallons benzene).

B_{Base} = Baseline benzene concentration of the refinery (volume percent benzene), per § 80.1280(a).

$B_{avg,y}$ = Average benzene concentration of gasoline produced at the refinery during averaging period y (volume percent benzene), per § 80.1238.

$V_{e,y}$ = Total volume of gasoline produced at the refinery during averaging period y (gallons).

(d) A refinery that plans to generate early credits must also show that it has met all of the following requirements prior to or during the first early credit averaging period, per paragraph (b) of this section, in which it generates early credits:

(1) Since 2005, has made operational changes and/or improvements in benzene control technology to reduce gasoline benzene levels, including at least one of the following:

(i) Treating the heavy straight run naphtha entering the reformer using light naphtha splitting and/or isomerization.

(ii) Treating the reformate stream exiting the reformer using benzene extraction or benzene saturation.

(iii) Directing additional refinery streams to the reformer for treatment described paragraphs (d)(1)(i) and (ii) of this section.

(iv) Directing reformate streams to other refineries with treatment capabilities described in paragraph (d)(1)(ii) of this section.

(v) Providing for benzene alkylation.

(2)(i) A refiner may petition EPA to approve, for purposes of paragraph (d)(1) of this section, the use of operational changes and/or improvements in benzene control technology that are not listed in paragraph (d)(1) of this section to reduce gasoline benzene levels at a refinery.

(ii) The petition specified in paragraph (d)(2)(i) of this section must be sent to: U.S. EPA, NVFEL–ASD, Attn: MSAT2 Early Credit Benzene Reduction Technology, 2000 Traverwood Dr., Ann Arbor, MI 48105.

(iii) The petition specified in paragraph (d)(2)(i) of this section must show how the benzene control technology improvement or operational change results in a net reduction in the refinery's average gasoline benzene level, exclusive of benzene reductions due simply to blending practices.

(iv) The petition specified in paragraph (d)(2)(i) of this section must be submitted to EPA prior to the start of the first averaging period in which the refinery plans to generate early credits.

(v) The refiner must provide additional information as requested by EPA.

(e) Early benzene credits calculated in accordance with paragraph (c) of this section shall be expressed to the nearest gallon. Fractional values shall be rounded down if less than 0.50, and rounded up if greater than or equal to 0.50.

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